



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application

Frank AUSTRUP, et al.

Application Number: 09/744,866

Filed: April 2, 2001

Examiner: Stephen J. Rawlings

Group Art Unit: 1643

Confirmation No.: 5636

Attny Dkt. No.: GIES3001/ESS

For: **CANCER CELLS FROM BODY FLUIDS CONTAINING CELLS,  
ISOLATION THEREOF AND AGENTS CONTAINING THE SAME**


**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

On page 9 of the Declaration of Professor Giesing filed on March 17, 2005, a distinction is made between epithelial, small cancer cells (M0 cells; mean diameter below 20  $\mu$ m) and mesenchymal large cancer cells (M1 cells; mean diameter above 20  $\mu$ m), and it is indicated that these constitute two types of disseminated cancer cells that occur in blood and bone marrow. Thus there are small and large disseminated tumor cells circulating in a body fluid of a subject. Whereas a screen of less than 15  $\mu$ m would retain both small and large disseminated tumor cells, the method of the claims yields a sub-fraction of disseminated tumor cells, including most of the larger ones. An unexpected result is that the large M1 tumor cells are premetastatic and therefore correlate with the clinical outcome of the cancer disease whereas the smaller M0 cells do not have the prognostic value of the M1 cells. See the declaration filed on March 17, 2005.

Respectfully submitted,  
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Date: April 27, 2007